Fertilising

Oilseed rape and other brassicas

with FertilizerpluS products
Guidelines for balancing your nutrient strategy with FertilizerpluS

FertilizerpluS is a range of high quality granular fertilisers produced by ICL. All products in the collection are Polysulphate®-based.

For good uptake of nitrogen from the soil your oilseed rape (OSR) crop needs adequate potassium and sulphur. However, most soils within the UK and the rest of Europe are now deficient in sulphur since the introduction of the Clean Air Act and subsequent reduction in depositions from atmospheric pollution.

ICL Fertilizers has done extensive research into how best to establish OSR. In our trials, we have found that an application of sulphur at planting (winter crops) improves the uptake of nitrogen. Trials have also found that with added magnesium and calcium we have seen an increase in root development in OSR.

Crops treated with sulphur from the FertilizerpluS collection of high quality products from ICL, which contain Polysulphate®, have shown yield and quality improvements at harvest.

FertilizerpluS recommendations

Winter OSR
- Polysulphate 1 applied at 100 kg/ha at drilling with DAP, followed by
  2 150-200 kg/ha in January/February.*
- ICL PKpluS 1 applied at drilling to meet phosphate needs and 2 Polysulphate at 150-200 kg/ha in January/February.*
- ICL PotashpluS can be used as a replacement for MOP with the added benefit of extra magnesium, calcium & sulphur.

Spring OSR
- Polysulphate, PotashpluS and PKpluS can be blended into your fertiliser products or applied as needed.

* Remember to consider the extra potassium from Polysulphate in your fertiliser calculations
Estimated nutrient offtakes (removal) by OSR and other brassicas

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Offtakes kg/t</th>
<th>Offtakes kg/ha</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Oilseed rape grain</td>
<td>Cabbage, fresh</td>
</tr>
<tr>
<td>K₂O</td>
<td>11.0</td>
<td>3.6</td>
</tr>
<tr>
<td>MgO</td>
<td>5.0</td>
<td>0.4</td>
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<tr>
<td>CaO</td>
<td>5.7</td>
<td>1.0</td>
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</tbody>
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FertilizerpluS product analysis

- Polysulphate (14% K₂O, 6% MgO, 17% CaO, 48% SO₃)
- PotashpluS (37% K₂O, 23% SO₃, 2.8% MgO, 8% CaO)
- PKpluS (various grades, tailor-made)

Expected benefits of balanced crop nutrition with FertilizerpluS products

- Increased nitrogen use efficiency (NUE)
- Better yield
- Higher oil content
Phosphate - needed to stimulate root development and for improved flower formation, seed production and to build proteins and other compounds essential for plant structure, seed yield and genetic transfer.

Potassium - secures yield and quality, transport of sugars and stomatal control. It reduces susceptibility to diseases and impact of drought and is essential for good nitrogen use efficiency.

Magnesium - fundamental for photosynthesis as it is integral to chlorophyll. It is also important in development of a healthy root system.

Sulphur - an essential constituent of proteins and oil production also critical for building dry matter. Essential for nitrogen use efficiency.

Calcium - for strong and healthy crops. It is a major building block in cell walls and reduces susceptibility to diseases. Along with phosphate, calcium is very important in the development of the root system.

Mined in the UK, ICL is the first – and only – producer in the world to mine polyhalite, marketed as Polysulphate.

Polysulphate is a registered trademark of ICL.

For specific recommendations or more information consult www.polysulphate.com/contact/ for your contact in your region.